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DATE MAILED: 03/27/2006

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|--------------------|----------------------|---------------------|-----------------|
| 10/671,780 | 09/29/2003 | Kazuhiko Nagano | Q77646 | 1079 |
| 23373 | 73 7590 03/27/2006 | | EXAMINER | |
| | MION, PLLC | NGUYEN, DUNG T | | |
| 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 | | | ART UNIT | PAPER NUMBER |
| WASHINGTON, DC 20037 | | | 2828 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| <u></u> | | Application No. | Applicant(s) | | | |
|--|---|---|---|--|--|--|
| Office Action Summary | | 10/671,780 | NAGANO ET AL. | | | |
| | | Examiner | Art Unit | | | |
| | | Dung (Michael) T. Nguyen | 2828 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| WHIC - Exte after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAIS nisions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONED | I. lety filed the mailing date of this communication. O (35 U.S.C. § 133). | | | |
| Status | | | · | | | |
| 1)🛛 | 1) Responsive to communication(s) filed on 22 December 2005. | | | | | |
| 2a)□ | This action is FINAL . 2b)⊠ This | action is non-final. | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposit | ion of Claims | | | | | |
| 5) [| Claim(s) <u>1-16</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdray Claim(s) is/are allowed. Claim(s) <u>1-16</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or | vn from consideration. | | | | |
| Applicati | ion Papers | | | | | |
| 10)⊠ | The specification is objected to by the Examiner The drawing(s) filed on 29 September 2003 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction to the oath or declaration is objected to by the Ex | re: a)⊠ accepted or b)⊡ object drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj | e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d). | | | |
| Priority ι | under 35 U.S.C. § 119 | | | | | |
| 12)⊠ a)l | Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents application from the International Bureau See the attached detailed Office action for a list of | s have been received. s have been received in Application ity documents have been receive n (PCT Rule 17.2(a)). | on No ed in this National Stage | | | |
| Attachmen | | | | | | |
| 2) 🔲 Notic 3) 🔲 Infori | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date | 4) Interview Summary (Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other: | | | | |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Gibbs (5463648).

With respect to claims 1 and 9-12, Gibbs shows in Fig. 1 a method for stabilizing an optical output of semiconductor laser (laser diode), comprising the steps of:

- (a) heating the semiconductor laser (11) with a heater (16) when the semiconductor laser is not in operation (column 1, lines 39-61); and
- (b) performing one of first operation stopping heating of the semiconductor laser (column 1, lines 59-61 discloses the switching step from a subthreshold mode (laser heating without producing light) to a superthreshold mode (laser operation for producing light). That is when switching to a superthreshold mode the operation of laser heating will stop) and a second operation of decreasing an amount of heat supplied to the semiconductor laser, almost simultaneously with startup of the semiconductor laser.

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With respect to claim 2, Gibbs discloses said heater heats a vicinity of the semiconductor laser at a heating rate which approximately corresponds to a heat-generation rate at which the semiconductor laser generates heat when the semiconductor laser is in operation, and said first operation is performed almost simultaneously with startup of semiconductor laser (column 1, lines 39-67 and column 2, lines 1-9).

With respect to claims 3-4, Gibbs discloses a current lower than an oscillation threshold level (SUB-THRESHOLD, column 1, lines 49-54) of the semiconductor laser is supplied to the semiconductor laser when the semiconductor laser is not in operation.

With respect to claims 5-8, Gibbs discloses the semiconductor laser is a multicavity semiconductor laser having a plurality of light emission points (column 3, lines 17-23).

With respect to claims 13-16, Gibbs shows in Fig. 1 said heater 16 comprising a heater wire (connection line (as interpreted by the examiner, the connection line is a wire) from power supply (16) to laser diode (11)).

Communication Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung (Michael) T Nguyen whose telephone number is (571) 272-1949. The examiner can normally be reached on 8:30 - 17:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.

Michael Dung Nguyen

Michael Duny Mr

03/16/06